



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,168	03/29/2001	Stefan Pleisch	CH20000077	4016

7590 08/18/2004
IBM CORPORATION
INTELLECTUAL PROPERTY LAW DEPT.
P. O. BOX 218
YORKTOWN HEIGHTS, NY 10598

EXAMINER

ZHONG, CHAD

ART UNIT	PAPER NUMBER
----------	--------------

2152

DATE MAILED: 08/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/821,168

Applicant(s)

PLEISCH ET AL.

Examiner

Chad Zhong

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-12 are presented for examination.
2. It is noted that although the present application does contain line numbers in specification and claims, the line numbers in the claims do not correspond to the preferred format. The preferred format is to number each line of every claim, with each claim beginning with line 1. For ease of reference by both the Examiner and Applicant all future correspondence should include the recommended line numbering.

Claim Rejections - 35 USC § 112, second paragraph

3. Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. The following terms lack antecedent basis:
 - i. the modified mobile agent – claim 1, line 2; claim 10, line 7; claim 12, line 7.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371 (c) of this title before the invention thereof by the applicant for patent.

5. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Threadgill et al. (hereinafter Threadgill), US 6,272,341.

Best Available Copy

6. As per claim 1, Threadgill teaches a method of operating a mobile agent that travels through a network of a number of computers, wherein the mobile agent is executed in a sequence of stages and wherein each stage comprises a set of places, the method comprising the following steps:

executing the mobile agent in at least one of the set of places of a respective one of the stages (Fig 1; abstract),

evaluating in which place of the respective stage the mobile agent has been executed successfully (Col. 23, lines 40-50),

agreeing on this place among the set of places (Col. 22, lines 10-30),

aborting and/or undoing any operation in connection with the mobile agent in any other place of the respective stage (Col. 45, lines 10-15; Col. 44, lines 65-67), and

moving the modified mobile agent resulting from the successful execution to the next stage (Col. 63, lines 35-40; Col. 64, lines 20-30).

7. As per claim 2, Threadgill teaches The method of claim 1 wherein the steps are repeated for any one of the sequence of stages (abstract; Col. 63, lines 35-40).

8. As per claim 3, Threadgill teaches The method of claim 1 wherein the mobile agent is executed sequentially in the set of places of the respective stage (Col. 21, lines 39-55; Col. 7, lines 50-60; Col. 23, lines 40-50), and wherein the mobile agent is not executed anymore in subsequent places after successful execution in one of the set of places and agreement on this successful execution (Col. 21, lines 39-55; Col. 7, lines 50-60; Col. 23, lines 40-50).

9. As per claim 4, Threadgill teaches The method of claim 1 wherein a decision is generated in each stage including at least one of a primary place that corresponds to the place in which the mobile agent has executed successfully (Col. 63, lines 35-40; Col. 64, lines 20-30; Fig 35), the set

Art Unit: 2154

of places of the next stage to which the modified mobile agent is moved, and/or the resulting modified mobile agent (Col. 63, lines 35-40; Col. 64, lines 20-30; Fig 35).

10. As per claim 5, Threadgill teaches The method of claim 4 wherein at least one of the primary place and/or the set of places of the next stage and/or the resulting modified mobile agent is confirmed to at least all other places of the respective stage except the primary place (Col. 48, lines 59-61).

11. As per claim 6, Threadgill teaches The method of claim 4 wherein at least one of the primary place and/or the set of places of the next stage and/or the resulting modified mobile agent is moved to all places of the next stage (Col. 38, lines 15-30).

12. As per claim 7, Threadgill teaches The method of claim 6 wherein the move is performed as a reliable forward function (Col. 26, lines 35-54).

13. As per claim 8, Threadgill teaches The method of claim 1 wherein the steps are managed by a fault-tolerance enabler (FTE) which is independent of the mobile agent (Col. 12, lines 35-45).

14. As per claim 9, Threadgill teaches The method of claim 8 wherein the FTE travels with the mobile agent to the set of places of the respective stage (Fig 35, Fig 5).

15. As per claim 10, Claim 10 is rejected for the same reasons as rejection to claim 1 above.

16. As per claim 11, Threadgill teaches Computer program product according to claim 10, wherein the program code means is stored on a computer-readable medium (Fig 16).

17. As per claim 12, Claim 12 is rejected for the same reasons as rejection to claim 1 above.

Conclusion

Best Available Copy

Art Unit: 2154

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents and publications are cited to further show the state of the art with respect to "a FAULT-TOLERANT MOBILE AGENT FOR A COMPUTER NETWORK".

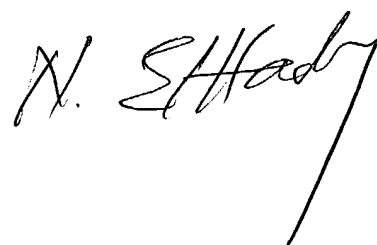
i. US 5,924,094 Sutter

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Zhong whose telephone number is (703) 305-0718. The examiner can normally be reached on M-F 7am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on 703-305-8498. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

CZ
August 6, 2004

A handwritten signature in black ink, appearing to read "N. S. Hadry", with a long, sweeping vertical stroke extending downwards from the end of the signature.